operated by six companies. Monitoring of the Texas facilities proved difficult, and some problems occurred at one facility. Oklahoma had only two contract monitors and had to rely on volunteers (Oklahoma DOC, History). Accordingly, when space became available in Oklahoma private prisons, the inmates were relocated to Oklahoma. By October 1998, all inmates housed in Texas had been relocated to private prisons in Oklahoma. In December 2000, 5,824 male inmates were in five Oklahoma contract prisons operated by three companies, and 872 female inmates were in one private prison.

As of September 2011, 4,738 offenders were in Oklahoma private prisons. In 2011, the OKDOC determined that the \$41.79 per diem rate at the private facilities was comparable to the \$42.41 daily cost in medium-security state prisons. The OKDOC cost comparison does not include capital costs and is evidently done on a short-term basis. However, even for the short run, public prison costs should incorporate the unfunded pension and retiree healthcare for current employees. Moreover, the comparison should be done on a long-term basis. Indeed, as the OKDOC stated: "It appears continued housing in private facilities is a viable alternative to the massive capital outlay required for construction." (Document provided by OKDOC.) Thus, a true cost comparison between public and private beds in Oklahoma should consider capital costs to build a new facility, because the OKDOC currently operates close to 100 percent of capacity in its public prisons.

Of note, Oklahoma has not built a public prison since 1976; however, it did buy a 600-bed private prison in 2000 for about \$27 million. Its public prisons in 2012 operated at 98 percent of capacity. Oklahoma in 2012 contracted with private prisons in the state to house almost 7,000 inmates, including out-of-state and halfway house inmates, while its state prisons held 18,000 inmates. The state contracted out medium- and maximum-security inmates. - rivate prisons in Oklahoma also held prisoners from Hawaii, California, Colorado, and Idaho. An OKDOC official claims that inmates who commit crimes while in Oklahoma private prisons impose a cost for adjudication and punishment by the Oklahoma justice system. On the other hand, contract prisons pay state and local taxes, provide employment, and purchase local goods and services. Determining the net financial impact of out-of-state inmates on Oklahoma is beyond the scope of this study.

Oklahoma uses --- prisons for population management. Instead of building new prisons, Oklahoma contracts with private prisons, providing important flexibility so that new prisons are not needed. If capacity utilization is low, fewer inmates are sent to private prisons. Clearly, when comparing private and public costs, the public costs should incorporate all the long run capital costs.

Contracts with prison operators require certain performance standards. For example, one such contract requires that 80 percent of inmates be involved in education and job training programs. - rivate prisons must pay for inmate medical costs under \$100,000 with cap of \$50,000 for a single episode. The state covers the rest. As in other states, OKDOC classifies all inmates, including those with medical problem s, and determines to which prison they are sent. Some contracts specify that the percentage of inmates with particular conditions mirror that in the public prisons.

A 2007 study of Oklahoma public and contractor operated prisons conducted for the state legislature concluded that private prisons in fiscal year 2006 were less expensive than the most comparable public facilities (MGT, 2007: 3-21). Specifically, the per diems were \$47.14 compared to \$51.94. The report noted the difficulty of determining comparable facilities. It also stated that the cost difference was in part attributable to the older age of the public prisons, which added to their security problems, requiring higher staffing levels than the newer contractor operated prisons. The study also noted that contractor operator prisons could be built quicker because the leading contractors have greater experience and expertise in building prisons than almost all states.

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The contracts also were shown to provide substantial flexibility for Oklahoma. The state had the option in some of the contracts to buy the contractor operated facility "at fair market value." Under the contracts, Oklahoma can reserve beds for up to 15 days, after which it has to pay for the beds even if it does not use them (MGT, 2007: 3-30).

The report showed that the contracted prices can be so low (as also in Mississippi above) that the private operator chooses to withdraw from the contract. This occurred in the case of the Cornell contract when Oklahoma raised the per diem by only seven percent in the ten years ending in 2006 (MGT, 2007: 3-20).

We now turn to our results. To begin, the public short-term costs are understated since Oklahoma does not fully fund its employees' retirement pensions. The Vera Report (2011) stated that 2.6 percent of the total OKDOC budget, or \$11.6 million, was unfunded, and our interview with an OKDOC official indicated that 20 percent of required pension contributions were underfunded. We applied the 2.6 percent to the total short run cost per inmate per day and obtained the range of \$0.99 to \$1.99.

Comparing public costs with the private per diem charges for 2011, we find that in the short run, one contractor-operated, medium-security prison was 2.16 percent more expensive while the other saved 4.35 percent. However, this is an inappropriate comparison because Oklahoma's prisons were operating at full capacity even with the use of private prisons. Thus, the only alternative for Oklahoma is to build more prisons and therefore, the long run state costs should be considered. The savings from the two medium-security prisons would then be 16.1 percent and 22.02 percent. For maximum-security facilities, the short run savings from the two private prisons were 27.56, and 29.23 percent. Again, the more appropriate long runsavings were greater and, in fact, were 35.27 and 36.77 percent.

Salaries of correctional officers in public and private prisons are comparable. For example, beginning public correctional officers in 2012 earned \$24,605, while private officers earned \$24,190, a 1.7 percent difference. The total long run savings by contracting out medium-security prisoners were \$8.63 and \$11.37 per inmate per day for the two prisons, which results mostly from capital savings. The two maximum-security prisons achieved savings of \$31.58, and \$32.92 per inmate per day. Additional savings arose from avoided unaccounted pensions and healthcare costs of \$1.29. The cost advantage of --- facilities likely arises from their greater productivity and possibly greater purchasing power. This coincides with the 15 percent greater productivity of private prisons experienced in Ohio. Thus, the long run savings from contracting out to private prisons is marginally attributed to wage differences.

Generally, the quality of private and public prisons is thought to be comparable. The co-existence of public and private prisons has provided important additional benefits. In response to private prisons, public prisons have changed staffing patterns to become more efficient. - ublic prisons have also consolidated case management and improved service as a result of the experience with - - - prisons.

Tennessee

Tennessee is a statutory state with a five percent required savings on private prison operations. The state owns the facilities, which are leased to private operators. Thus, like Florida, short run or operational savings are relevant.

Tennessee began the use of contract prisons because of overcrowding during the 1980s. The original 1986 law authorizing contract prisons allowed only one work camp. The legislation was amended in 1991 to allow one minimum- or medium-security contract prison. Tennessee then built three prisons, one of which was leased to a private firm under a three-year contract with a possibility of two-year renewal. This facility has between 1,500 and 1,600 beds. After the five years, the facility must be rebid. The contract prison must achieve five percent savings over a comparable public prison providing the

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same quality of service or higher quality at the same cost. The evaluation of contractor performance is done in the third contract year.

In 2013 and for some time prior, contractor operation has been evaluated through an annual inspection review of education services provided, the security level, and other indicia. Tennessee is still permitted to have only one contract prison. However, the state can contract with counties to house inmates, and the counties can then contract with private firms. As of 2013, Hardeman County has two contract prisons, one owned by the county and the other by the private contractor CCA. The one state-owned contract facility is South Central Correctional Center, which is leased to CCA. Each contract prison is overseen by two DOC monitors. The contract prison wardens participate in DOC meetings. One warden of a contract facility in 2013 was formerly a state prison warden. The contracts specify training requirements for correctional officers. Some private prison administrative employees receive some training in state facilities. Noteworthy, the state recently considered whether to take over South Central, sell the facility or continue to lease it. Tennessee decided to continue leasing, suggesting state satisfaction with the arrangement.

In terms of contract specifics, Tennessee guarantees pay ment for 90 percent of the contract capacity even if it uses less than the 90 percent. For utilization in excess of 90 percent, it pays the normal per diem. In county contract facilities, the state must give notice of 270 days before it can pay for fewer beds.

In April 2010, the Fiscal Review Committee of the General Assembly of the State of Tennessee conducted a review of private and public prisons for the fiscal year ending in June 2009. The committee staff reported that the state costs were \$53.32 per inmate per day, which meant that the contractor's price including all state associated costs had to be below \$50.65 per inmate per day. The state, after all, still incurred such administrative costs for contract prisons as inmate classification and record maintenance. The relevant figure for the private facilities (per diem plus associated state cost) was, in fact, \$43.99 per inmate per day, which is \$9.33 below the state cost, amounting to savings of 17.5 percent.

The report stated that it was difficult to do a dollar-to-dollar comparison because the relevant facilities have different levels of healthy inmates, although the DOC could not quantify the cost of these differences. Additionally, the report states that private facility had a relatively safer inmate population based on the number of close custody and maximum-security inmates in each facility. Again, the DOC could not quantify the cost difference

Tennessee was the only one of our examined states that reported the maintenance and the central administration overheads to be added to the contract price to determine any savings. We followed Tennessee and calculated the savings considering these costs.

Texas

Texas began its legislative process of privatization in the late 1980s because of prison overcrowding and the state's private prisons were built in the mid-1990s. The state also built public prisons in the same period. Initially, privatization took the form of state finance by revenue bonds, later by general obligation bonds. The later privately operated prisons were built by the contractors who typically received a seven-year lease, renewable at the end of every two years. The Texas Legislature required that private contractors achieve ten percent lower costs without specifying whether the savings needed to be in operations or overall costs. In fact, Texas evaluates the savings on operating costs, which is appropriate in this particular case because the facilities are, in general, owned by the state and simply operated by private contractors. The data in Table 1 do not include medical services since Texas

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contracts with local medical schools for all inmate medical care. Further, if medical care requires more than 72 hours, the inmates will be transferred from the private prison to a state prison.

In 2012, Texas contracted with 17 contract prisons comprising one-third of its inmate population. Most private facilities are minimum-security, while some are medium-security. Most private prisons are small built for 500 inmates, while the one described as a prototype in Table 1 is for 1,000 inmates. Of the 17 private prisons, 13 were owned by the state under the BTO arrangement, and four were built or renovated and owned by the private operators. Most of the publicly operated prisons in Texas are quite old, and the oldest was built in 1856.

In 2012, Texas had approximately 140,000 prisoners housed in public and private facilities with a total capacity of 156,000. County jails are used as a relief valve to house prisoners when excess demand occurs. In addition, some of the private prisons specialize in certain types of offenders and are able to offer special treatment. For example, the private prison in Henderson, Texas specializes in treatment of drunk drivers.

Except for two public prisons in Houston and Dallas the remaining public and private prisons are located in rural areas or smaller cities, enhancing the local economy. - ositions in these prisons are typically filled by local residents, providing jobs for the local community. Contractor-operated prisons purchase other local services, all contributing to these areas with the usual multiplier effect.

The direct costs per inmate in Texas public prisons in 2010 were \$53.77, indirect were \$1.30, and hierarchal were \$0.19, reaching what Texas considers average variable costs of \$55.26 per inmate per day. This figure is what Texas uses in its calculation for the required ten percent savings. This would yield a price no higher than \$49.73 per inmate per day for the private facilities. The appropriate avoidable costs should also include the underfunded pensions and retiree healthcare of \$4.44 which means that the appropriate required price to reach is \$53.73 per inmate per day for private facilities. The price paid to the contractor for the 1,000-bed prototype was \$37.47. The contract varies for each prison, while prices are typically lower for larger prisons due to significant economies of scale We learned from Florida that the costs per inmate are 15 percent higher for a 750-inmate prison than for a 1,000-inmate prison.

Our interviews have clearly shown the benefits of the competition among the private contractors. The private companies cannot go below the public performance standards detailed in the contracts. However, evidence suggests that competition often yields higher performance quality in order to maintain long-term contracts. In addition to competition in pricing, Texas gains additional concessions through individual negotiations that follow the selection of the contractors. Thus, the states and inmates gain more than merely the statutory lower prices in the contract negotiations.

In addition to the actual savings, we learned from our inter views with officials of the Texas Department of Criminal Justice (TDCJ) that contractor operated prisons — to a greater extent than state facilities—have employed electronic tracking systems instead of the manual key board system. Electronic tracking systems provide greater security since access requires personal identification. In addition, some private prisons exceed the required standard eight-times-a-day count of prisoners. In terms of annual refresher training for correction officers, some private prisons train 56 hours annually instead of thestandard 40 hours for public prisons. – rivate and public wardens together attend the same monthly meeting held by the six regional TDCJ directors. This clearly indicates the strong partnership and cooperation between the public and private sectors.

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11. General Discussion of Public Costs and Private Prices

The critical issue of this study is the finding for the savings state governments derived from contracting out prison services. When the state legislatures enacted the statutory requirements for savings, they usually did not specify the exact nature of the savings. In this study, we distinguished between the direct operating savings that relate to the short run and the overall savings, which relate to the long run. As indicated earlier in this report, long run savings are the correct measure, except when a - - - prison manages an existing public facility. The typical motivation for - - - prisons is to relieve overcrowding where the only viable alternative is for the state to build its own prisons. Further, given the aging of U.S. prisons, even without overcrowding, some substantial rebuilding is often necessary, making long run costs applicable. Another lesser but related motivation is to save state resources.

Our study found that contracting out inmates to private prisons saved state governments money while maintaining performance at least at the same quality as public prisons. A head of corrections of a large state suggested that the compliance with the detailed contracts help ensure comparable performance. The existence of private prisons fosters competition and helps constrain spending on public prisons.

Short-term savings run the gamut from Oklahoma's loss for medium-security prisons of 2.16 percent all the way to California's savings of 57.36 percent. Texas and Oklahoma's maximum-security private prisons had relatively high short run savings of 37.39 and 29.23 percent, respectively.

As discussed earlier in section 3, the indirect costs are incorporated in the short run costs. The reported indirect costs range from \$3.72 per inmate per day to \$6.64 per inmate per day. We used mostly the estimates of the Vera report when available. Studies for the legislatures of Oklahoma and Tennessee concluded that about 75 percent of indirect costs continued even for the privatized inmates. In the long run, adjustments often occur and the private prisons might assume more of these currently government functions. Thus, in the long run, a greater percentage of the indirect costs may be avoided. In any case, the magnitude of the indirect costs is small and could not affect the results. As discussed in section 4, either the entire or only 25 percent of the indirect costs could be considered avoidable. We calculated in Table 1 both alternatives, however in our conclusions we maintained our conservative approach and considered only the 25 percent as avoidable costs. In any case, available data indicate that indirect costs are quite low, most in the range of \$5 to \$7.

Long term savings ranged between Kentucky's 12.46 percent and California's 58.61 percent, while Maine was close to California withpotential savings of 49.38 percent. Maine, which does not contract out to private prisons, was incorporated in this study because of the availability of its detailed data. The extent of the details for the direct and indirect short run costs vary among the analyzed states. In the case of Maine, it is noteworthy that its lack of both private and public competition and its small prisons that cannot exploit economies of scale explain the state's high costs and great potential for savings. Indeed, additional competition among the states and private companies could be most beneficial. The extent of the savings including satisfying the statutory requirements did not change appreciably when just 25 percent avoidable indirect costs were employed. Only in the short run for medium-security prisons in Oklahoma and Arizona did the savings decline to -2.16 and -1 percent, respectively. However, the long run savings for both these states matter and those savings were maintained.

The following three factors led to lower costs of contract prisons. The issues of short versus long run avoidable costs and unfunded pensions and healthcare were usually ignored and led to greater savings for contracted prisons than typically found.

Short8Versus Long8Term Costs

The state legislatures enabled contracting out in order to relieve overcrowding. In several states like Ohio, Florida, Mississippi, and Kentucky, a related objective was to achieve savings. The legislatures of

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these mandatory-savings states have determined that the required savings were obtained, even though they typically focused only on short-term costs.

In fact, the savings should reflect the avoidable costs to the state. Since, in general, overcrowding, along with the aging of the state prison infrastructure, means that the only alternative is state construction or major renovations modernization, or repair, interest costs should be incorporated as the avoidable costs for government, an issue recognized by the Legislative Analyst 's Office in California (2012B: 16). However, the states do not report depreciation since they are not private entities.

Better data are available for the interest payments made on bonds floated to build major infrastructures. Depreciation was estimated at \$4.61 by the US BO-/GAO, and we incorporated that figure in all the states that did not report depreciation. The Legislative Staff Report for Arizona determined that depreciation was \$9.30, indicating that the use of \$4.61 is conservative. This long-run cost added to the savings of contracting out in the range of 2-14 percentage points, with six of the 13 observations at ten or more.

Unfunded Pensions and Healthcare

Vera, 2012, collected data from the 40 states that responded to its inquiry about the total cost of corrections. Vera obtained results for all the states that we examined except for Mississippi. The Vera study includes amounts for which the state is liable but did not fully pay. It also includes short-run costs attributable to corrections but which were not in the corrections' budgets. Capital costs, which relate to the long run and are not normally part of the corrections budget, were also enumerated. For our purpose, these are avoidable costs when states contracts out prisoners. These unfunded pensions and retiree healthcare contribute 1-13 percent of total long run costs with a mode of 4-5 percent.

Labor Costs

In the long run, labor costs were in the range of 43-71 percent of total costs. In general, contract prisons pay comparable wages but somewhat less in benefits. For example, Ohio private correctional officers are paid \$1 less per hour. In Oklahoma in 2012, the beginning base salary for a correctional officer was \$2,153 per month at the Northeast Oklahoma Correctional Center. A comparable beginning private correctional officer at the Davis Correctional facility earned \$2,068 per month, 3.95 percent less than a public officer. Our interviews with state DOC officials revealed that, on occasion, private correctional officers were paid higher wages but lower pensions. The rationale provided is that the young correctional officers are concerned more about their current wages than distant pensions and retiree healthcare benefits.

- rivate contractors typically offer workers matching contributionsup to five percent of their salaries for their 401k accounts. However, many workers choose not to contribute their share and thus lose the employer's contribution. - rivate and public correctional officers are drawn from the same labor pool. Generally, the training is substantially the same, providing similar number of hours with a few course differences. See for example, Arizona RF-, at

http://www.azcorrections.gov/adc/divisions/adminservices/notice_rfp_1200001388.pdf.

In Ohio, for example, they attend the same training academy and, in another state, public correctional officers work part time in private facilities. It appears that private contractors are able to hire correctional officers of similar attributes to those hired by the state. Also, private contractors are more flexible than state governments to reflect specific market conditions and the specific preferences of employees. - rivate contractors provide a benchmark for labor costs for state correctional employees.

In California where only community correctional facilities operate within the state, the wages and benefits package in the correctional public sector are exceptionally high. California has 30,000 unionized

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correctional officers and, each year, 130,000 candidates apply to become correctional officers. This excess demand for employment in public prisons is not surprising since the starting minimum salary in 2008 was \$3,774 per month, and some earn more than \$73,000 a year. California State Auditor (2009: 49) reports that during fiscal year 2007-8, beginning correctional officers were paid an average of \$50,739 excluding any overtime. The annual pension contribution by California even for new officers was \$12,000 for fiscal year 2009-10. This was \$4,000 more than other state employees received. The overwhelming excess supply of applicants for correctional employment clearly suggests that the total compensation package was well above these workers' market values (CALAO, 2008). A strong union and lack of competition within the state from private contractors contributed to the exceptionally high wages and benefits. Maine, which again has no competition from private contractors and less efficient, smaller sized facilities, also had relatively high labor costs.

We wish to stress that government sources were primary for this study. Also, when calculations were made, we were conservative (biased downwards) in the state costs. The long run savings of contracting out prisoners are attributed, in declining importance, to the long-term consideration of costs, the inclusion of unfunded pensions and retiree healthcare, and the lower private costs of labor. We found no evidence that the lower costs are associated with possible lower performance of private prisons. Actually, we encountered government evidence that the performance of - - - prisons was, on occasion, higher than public prisons in Florida and Kentucky and comparable in the other examined states. An explanation for the at least comparable performance is the detailed contracts and the monitoring including onsite that touches upon all the performance measures.

Other possible explanations for the savings are the purchasing power and flexibility in purchasing of the private firms. The contracting firms buy in large quantities for various prisons and cantake advantage of opportunities that arise rather than be constrained by cumbersome state purchasing regulations. Also, in operation, private firms have greater flexibility in employment, perhaps taking greater advantage than government in using part-time workers (Interview with a Texas Department of Criminal Justice official, October 26, 2012). - rivate firms, in some cases, enjoy greater flexibility in hiring, which saves time and resources. Also, private firms can tailor their wages to specific labor market conditions, which is more difficult for public employers. For example, private correctional officers are paid less in rural communities, which usually have lower cost of living than in metropolitan areas. The state cannot differentiate wages to the same extent, and therefore overpays in rural areas or underpaysin metropolitan areas. State officials in our examined states provided these explanations.

Two additional explanations for the savings achieved by the contracting firms are beyond the scope of this study. One relates to competition versus monopoly, and the other is beyond the control of state governments. Several of the interviews with state officials suggested significant competition among the firms in responding to the request for bids to operate prisons. The interviews and O- - AGA of Florida suggest that competition from private firms yield more efficient operation in public prisons. Blumstein et al. (2007) found that states with contract prisons within the state experienced greater savings for public prisons than states that either do not contract our prisoners or contract out-of-state. Even though contract prisons house less than seven percent of all inmates, their competitive effect is strong. The lack of such competition in government often leads to less efficient operations.

Texas provides a good example to the benefits of competition. - rices of privately operated prisons increased from \$37.48 per inmate per day in FY2010 to \$39.13 in FY2011, and then declined to \$37.97 in FY2012. Short run costs for the prototype 1,000-bed state facility over the same period varied from \$44.50 to \$44.89, and then declined to \$41.99 (Texas Legislative Budget Board, 2013). It is typical in competitive industries that prices and costs constantly vary. Indeed, in a three-year period, we witness fluctuations in private prices and state costs, which may indicate the effects of competition.

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Interestingly, state governments could become competitive and reduce expenses if states were allowed to compete for inmates and use prisons as an export base for economic development for their distressed localities. The other explanation that is beyond the control of state governments is the fact that private firms operate newer facilities, often enriched with technology, that are cheaper to operate than the older, labor intensive public prisons. The Legislative Analyst's Office (CLAO) in California recognized this advantage of newer prisons (CLAO, 2012B: 16). One qualification relates to the medical costs. The contracts with the private contractors differ with respect to the private contractor's responsibilities towards medical services. In some states, sick prisoners were n ot assigned to private prisons. In other cases, the state becomes responsible for medical costs above a certain level once a prisoner from a private prison is sent to another location for medical services. Florida and Arizona tried to correct the data for the greater responsibility of public prisons for medical costs. Since a similar correction for the other states is beyond our ability to determine, we calculated how high medical expenses could become in order to just maintain the legislative mandatory savings. Noteworthy, Arizona awarded a contract for a 1,000 medium-security beds beginning January 1, 2014, which is a full-risk medical contractfor the private provider (see

http://www.azcorrections.gov/adc/divisions/adminservices/Request_for_-roposal_ADOC1200001388.a spx).

Given uncertainties about the exact financial responsibilities of the state for medical care of inmates in private correctional facilities, we determined the maximum level that medical expenses could be while the statutory requirements were just met. Then, we observed whether medical costs of that magnitude are reasonable. The actual range of per diem reported medical expenses in public prisons is \$5.97 in Texas to \$43.95 in California (rows 2a, and 2b). Our calculated range for maximum "allowable" additional unknown medical costs (rows 36a, and 38b) is \$11.23 in Kentucky to \$100.62 in California. Thus, it appears that these "allowable" medical expenses are very high and therefore contracting out is still attractive regardless of our "unknown" additional state medical responsibilities for inmates in private facilities.

Another indicator for the validity of the savings is the ratio of the maximum allowable medical expenses to the actual medical expenses. This ratio suggests the maximum extent to which medical expenses could reach due to extra public support of contracted prisons' medical costs, while still maintaining desirability of contracting out. The range of the ratios is 0.93 for Mississippi to 3.96 for Texas. Intermediate ratios were for California and Oklahoma medium s ecurity, both at 1.8. Thus, California could support the medical expenses of its inmates in contracted prisons by almost twice its existing level and still benefit from contracting out (rows 40a, and 42b).

12. Summary and Conclusions

This study compares costs of state prisons to the prices paid for contractor-operated prisons. The data used were from government sources, interviews with officials of statedepartments of corrections, and analysts from state legislative oversight agencies. We analyzed nine states and incorporated deailed federal data to supplement incomplete state data. Especially detailed data were available for Maine and Mississippi.

There are three primary reasons for the use of private prisons: to generate cost savings and avoid large capital expenditures; to relieve overcrowding whether ordered by the courts or required because of threat of litigation perceived by DOCs; and sale of a state prison to private operators for budgetary reasons. The statutory savings requirements for private prisons are Florida (seven percent), Kentucky (ten percent), Mississippi (ten percent), Ohio (five percent), and Texas (ten percent). The statutory requirement applies both to where the contractor operates state prison and to where prisoners are

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placed in private prisons. In cases like Florida and Mississippi, the contractor operates state prisons. In Kentucky and Oklahoma, the prisoners are transferred to private prisons. Texas uses both models.

Overcrowding, which is the second reason for the use of private prisons includes both the out-of-state transfer of inmates and the in-state use of private facilities. In California, the courts required a timely reduction of overcrowding, leading to the use of out-of-state contract prisons. The examined states that experienced overcrowding in addition to California were Arizona, Kentucky, Ohio, Oklahoma, Tennessee, and Texas.

Contracting out by selling a state prison to private operator generates an immediate lump sum amount to narrow a state budgetary deficit. This occurred in Ohio, which sold the Lake Erie Correctional Institution to a private contractor.

The nature of the private prison contract suggests what is appropriately included in the state avoidable costs. The calculated state costs should reflect the avoidable costs to the state when private contractors are considered. The state legislators normally do not specify the costs to be considered for the statutory savings, and this is left to the interpretation of DOC staff. It is important to emphasi ze that even if the categories of the avoidable costs are specified, the measurements are difficult, and could be subject to individual interpretation.

Economic theory helps us determine the types of costs that should be taken into consideration because of the use of private prisons. In statutory states without overcrowding, the appropriate comparison is between the state short run or operating costs and the contractor price. When overcrowding exists, the total of the operating and capital costs should be compared to the contractor price. When a public prison is sold, as in Ohio, total or long run cost is used for the comparison with the contractor's price. When overcrowding exists, both the operating and capital costsnamely long run costs, are the avoidable costs.

Table 1 specifies the short run direct and indirect costs, which are linked to the operation of the state prisons. The long run costs include the short run costs, in addition to depreciation and the government interest payments for the bonds that are used to finance a prison. These two items, which are also termed capital costs, become avoidable costs when a DOC avoids building new prisons by sending inmates to private prisons. Our estimation of the avoidable costs includes a few categories of actual costs, which were missing in prior studies. In the short run, costs included data on underfunded pensions and retiree healthcare of current employees. These costs are easily ignored when state budgets are tight, and are not reflected in the then current delivery of prison services. However, these costs are real and are being postponed to be paid in the future. Neglecting these costs lowers the state's apparent avoidable costs, and distorts legislative intent. California has by far the highest underfunded costs at \$15.18 per inmate per day, followed by Maine's \$6.86. The others range from \$0.55 per inmate per day in Florida to \$4.44 in Texas.

The indirect costs are the administrative costs incurred by DOCs and other state agencies linked to and for inmates. These costs are difficult to obtain and especially to determine what proportion is avoidable. We used conservative estimates of these costs as derived jointly by the .Ø. General Accountability Office (GAO) and the US Bureau of - risons (BO-). Again, maintaining our conservative approach, based on data for Tennessee, we chose to include only one-fourth of the state indirect costs as avoidable.

For Florida and Mississippi where contractors manage the state prisons, we use the short run costs as avoidable costs to the states. In Florida, the short run savings were seven percent as required by the state law. In Mississippi, the short run savings were 8.69 percent, slightly below the ten percent statutory requirement. The Joint Legislative Committee on - erformance Evaluation and Expenditure

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Review (- EER) found that the costs of the private contractor met the statutory requirements (Mississippi, - EER, 2011, and 2012: 1). The long run savings are irrelevant for both states.

Whenever overcrowdingexists, the statutory requirement is less relevant since the overcrowding has to be alleviated in a timely fashion. California is a classic example of the cost encountered for not avoiding substantial overcrowding and for preventing the operation of private prisons in the state. Overcrowding requires that the long run avoidable costs be compared against the contractor's price. The long run costs are appropriate because the state avoids building its own prisons. The long run consideration is also relevant when the state owns old prisons that need major renovations, prisons that are subject to demolition, or when the state faces difficulties in raising capital. The long run savings for Arizona's two prisons are 14.25 and 22.34 percent; California had 17.67 and 58.61 percent savings for two prisons; Kentucky's savings for its four prisons ranged between 12.46 and 23.5 percent; Ohio saved 20.28 and 26.81 percent in 2012 and 2010, respectively; Oklahoma saved on its four prisons 16.77 to 36.77 percent; Tennessee had 17.32 percent savings; and Texas had 44.95 percent savings. Maine, which does not utilize contract prisons, could have saved 47.65 percent when below capacity and 49.38 percent, if overcrowding exists.

At least equal performance to state prisons is required for contracting out Indeed, the American Correctional Association established standards for prison performance, which the contract prisons generally met. Further, interviews with state DOCs reported that their contracts mandate performance levels, and DOCs closely monitor adherence to the contract requirements. - enalties can be and are imposed for performance violations. In Florida, contractors performed above the state level in training and educating inmates, which could be attributed to competition among contractors and the desire for contract renewal. Ohio and Texas require joint meetings of public and contract wardens, a practice that leads to greater cooperation and mutual learning. This practice seems to be beneficial and could be extended to other states.

A prison facility has limited alternative uses, capital costs are high (beyond the financing ability of most states), and the expected life span is long. At the same time, demand for prison space fluctuates and is expected to significantly drop in the near future, leaving some public prisons vacant. The existence of private prisons enables DOCs to avoid building new prisons when demand is high and prevents waste of these facilities when demand declines. This is a major long term cost savings that is not considered in the statutory calculation of the avoidable costs.

A major finding from the data and the interviews is that competition yields savings and better performance. The economics of industrial organization demonstrates the important benefits derived from even the presence of a small competitor in an otherwise monopolistic market. Examples include the transparent tape and physicians' services industries. In both industries, small firms have substantially increased competition and led to important gains for consumers. In the transparent tape industry, prices were reduced, and in the physicians' services industry, quality and innovations were introduced.

In the case of corrections, even though private contractors comprise less than seven percent of the industry, they have generated substantial competitive benefits. The benefits emanate from two sources. As more contractors compete, the prices are lower and the performance is better. But, savings also occur in public prisons. When private prisons become an available option, efforts are made by managers to lower costs, and demands by employees are constrained since public employees realize that the legislature might favor private corrections as a more cost effective optiorFurther, the greater the competition, the more managerial and technological innovations are introduced in both the public and private segments of the industry. It is important to note that the existence of public prisons also keeps in check price hikes by the private prisons. The knowledge that states could resort to the use of just public

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prisons encourages private contractors to offer their services at even lower prices than the statutory requirement.

This study leads to a possible moderate change that could encourage further competition and thereby achieve more efficient delivery of prison services. This is the model of managed competition initiated by then-Mayor Stephen Goldsmith of Indianapolis, Indiana, which encouraged public workers to participate in the bidding for their services to preserve their jobs along with the existence of private competitors. Mayor Goldsmith initiated the "yellow pages" test where he enabled contracting out of all city services whenever several providers were listed. But, he went one step further and allowed city employees to compete for the service, as well. By so doing, public employees, as well as private contractors, have an incentive to search for managerial and technological innovations offer the service at competitive prices. This is possible when the outputs are quantifiable and the contract can clearly state what is required, and where oversight by government is relatively inexpensive. A third requirement is that a sufficient number of competitors, including the public workers, emerge. Contracting out to a monopolist private company that replaces a public provider is undesired. All relevant contractors, public and private, should be aware of upcoming contracts. The existing situation where public prisons operate indefinitely yields an unnecessary monopolistic power that could yield inefficient operation.

Our discussions with state correctional executives suggested that contracts can specify the minimum performance levels required from the contractor that wins the bidding. Also, the private prison industry includes already a sufficient number of firms that compete across the United States. Thus, in each state where the legislature allows contracting out prisons, some existing state prisons could be auctioned as a "managed competition model" for a sufficient time period to encourage contractors to devote the appropriate resources for innovation and improved performance. This extension of competition could obviate to some degree the necessity for detailed contract specification and monitoring efforts. Reliance on markets like managed competition could reduce the necessity for such complicated calculations as in our Table 1.

The discussion above leads to a recommendation that could be considered. State legislators in the statutory states have established arbitrary levels of required savings of five, seven, and ten percent. High percentage savings may discourage some bidders and be counterproductive. It is not clear why the percentages differ and what the basis is for these numbers. By instituting managed competition where the public sector competes on a level field with the private sector, we let the market determine the savings. In such a case, the complicated calculations of what cost items should be considered as avoidable costs and how to measure these costs becomes unnecessary. Managed competitionhas worked for many local public services, and there is no reason why it cannot be successfully implemented in the state prison industry. - ublic and private competition and cooperation in service provision has worked and should be extended.

This study raises some important issues related to contracting out prison services that could improve the process and outcomes and may warrant further analysis:

1. Fluctuations in demand: Demand for beds fluctuates over time and is expected to decline because of the decreasing number of youth, changes in laws like the "three strikes" statue, and easing of penalties for drug-related crimes. As a result, we may witness a decline in occupancy in some states, while demand remains high in others. Easing of legislative rules and procedures of interstate transfer of inmates could save capital outlays for some states where the cost of imprisonment is high or overcrowding exists. At the same time, inmate transfers could raise revenues for states that are efficient in service provision, enjoy economies of scale, or have unused capacity.

- Medical services:Costs for medical services are very high, and the extent of the costs varies
 substantially among the states. One issue is whether contractors or the states should bear the risk. It
 seems that analysis of medical procedures of existing contracts and a search for a socially efficient
 procedure that maintains business viability is desired.
- 3. Length of contract: Our suggested managed competition model is relevant for the existing state prisons and does not apply to other cases. An important issue that is not addressed in this study is the length of time for a contract. This period has to be long enough to recover the initial investment and maintain incentives for adopting technological and managerial innovations. At the same time, a lengthy contract prevents new competitors from entering the market with innovations that could lead to lower prices than existing contractors. However, if a sufficient number of prisons join managed competition and contracts open at varying times, lengthy contracts are possible. Economic theory suggests that as the market increases with both competitive contractors and prisons available for contracting, the length of contract time could be extended, and the extent of regulation by government could be reduced. We suggest a follow-up study on the lessons of managed competition in similar state and local markets to learn of its implications for the prison industry. If indeed the model is "sound," then the study could follow with a model and stages of implementation.

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Appendix 1: Data Sources for the Table on State Costs, Contract Prices, and Savings

Arizona: We used the following three sources:

- (1) Auditor General Staff Analysis of the Department of Corrections, Fiscal 2009 8Fiscal 2010. http://www.azauditor.gov/Reports/State_Agencies/Agencies/Corrections_Department_of/- erformance /10-08/10-08.pdf Last visited December 24, 2012.
- (2) Arizona Department of Corrections, 2011. **FY 2010 Operating Per Capita Cost Report**, Bureau of -lanning, Budget and Research, April 13.
- (3) Arizona Joint Legislative Budget Committee, 2012. **Staff Memorandum: State**Private Prison Cost Comparison. September 19.

For the short run costs of male inmates in minimum- and medium-security prisons, we used data from page 3 in (2). Depreciation and other capital expenses were calculated by the Arizona Joint Legislative Budget Committee Staff, 2012 to be \$10.71 instead of the \$1.41 reported by the AZ DOC. A similar adjustment of \$2.67 was made to account for underfunded pension liabilities as reported in (3) for Arizona.

The following unaccounted costs were obtained from the Vera Report. We calculated \$0.16 to be hierarchical costs per inmate per day for both minimum and medium prisons. We did not include this figure. Instead, we used the more comprehensive figure of 11 percent, which also includes the administrative functions of DOC provided by BO-/GAO. This calculated figure for Arizona was \$5.42, which falls in the range of \$1.40 to \$6.64 of the other examined states, and the GAO benchmark figure of \$8.09. Debt service per inmate per day was \$0.04. This was calculated from the \$530,000 reported by Vera for 2010. To be conservative, we did not include the \$2.2 million in judgment costs reported by Vera since we were unsure whether such costs should be fully allocated to public correctional facilities.

California: For California, wages can be separated from benefits. California State Auditor, California Department of Corrections and Rehabilitation: It Fails to Track and Use Data..., September 2009, Report 2009-107.1. For California, wages and salaries were \$36.72 per inmate per day, overtime was \$6.63, and benefits were \$16.25. Facilities and operations include food, repair, clothing and other items. Education and training of inmates are included in state-provided professional services. The hierarchical cost of \$4.04 per inmate per day includes both administration and headquarters costs. Vera reports unattributed statewide administrative costs for corrections to be \$438 million. We added the per diem per inmate of \$0.62 to the \$44.04 to obtain \$44.66. Since no data are available on interest and depreciation for California, we therefore used the \$4.61 figure from BO- /GAO. The annual price per inmate was \$29,100 obtained from the above California State Auditor Report: 36. The daily fee was therefore \$79.73 per inmate.

Monitoring costs for Californiahave been exceptionally high. The state sent 73 monitors to the out-of-state facilities resulting in a total costs for oversight and monitoring for 2010/11 of \$15,981,000 or \$4.42 per inmate per day. The cost and inmate population were obtained from the California Budget for Department of Corrections and Rehabilitation, 2011/12: CR5, and CR15.

Data for 2011/12 were obtained from California Legislative Analyst's Office (CALAO), 2013. California's Criminal Justice System: A - rimer. January, 17: 50. Obtained from http://www.lao.ca.gov/reports/2013/crim/criminal-justice-primer-011713.pdf Last visited March 21, 2013.

We had to make some minor adjustments to the data in this report in order to fit the categories of Table 1. However, this did not distort the values for the total short run and long run government costs. Security in the report was classified as personnel services. Facility operations, which include maintenance and utilities were incorporated in Table 1 as utilities. The remaining items under facility operation and records were classified in Table 1 as hierarchical. "Food and Clothing" were incorporated in Table 1 under the same categories. The remaining items under the category "Inmate Food and Activities" were added to the miscellaneouscategory, which was classified in Table 1 as "All other." Finally, "Rehabilitation - rograms" were classified in Table 1 as 'State - rovided - rofessional Services."

Vera reported 167,276 inmates in fiscal year 2011. It reported \$320.1 million in underfunded retiree healthcare contributions and \$607 million in underfunded retiree healthcare contributions for current employees, totaling \$927.1 million. The latest California State Auditor Report (up to November, 2012) provides the costs for 2007/8, while Vera's underfunded and statewide contributions are for 2009/10. Vera also reported education and training costs provided by the California Department of Forestry and Fire - rotection of \$4.5 million. Since it is unclear whether these costs are recurring expenses, we chose the conservative approach of excluding them.

Florida: We chose to use Table A-5 Adult Male-Size Adjusted for 2008/9 from the Office of - rogram - olicy Analysis and Government Accountability, - rivate - risons Exceed Savings Requirements. Research Memorandum, the Florida legislature, April 20, 2010. Indirect costs entail costs imposed on the Departments of Corrections and Management Services. Our interviews revealed that there may be unfunded pensions for state employees, so the current state costs could be understated. However, Vera reports underfunding of only \$0.55 per inmate per day. As for education and training programs, the cost for public facilities was \$0.79 per inmate per day. However, the spending by contractor-operated male prisons for the same services, adjusted for size so as to be comparable to state facilities, was in the range of \$3.92 to \$5.88 (Table A-5). For Table 1, we used the average of the two values, which is \$4.90. Table A-7 of the above report provides the per inmate per day price of \$50.68 for the Bay Correctional Facility and \$50.48 for the Moore Haven Correctional Facility. The average for the two private prisons was \$50.57 per inmate per day. For the construction costs, we used O- - AGA, 2010B for the publicly built, close custody Suwannee Correctional Institution of \$97.8 million for 1,521 inmates. At the interest rate of four percent, the cost per inmate per day is \$7.05. This cost item is presented in Table 1, but is not used in the calculation.

GAO adjusted figures: The calculation of costs for the individual states does not include the long-term costs for the facilities. However, it is reasonable to assume that state capital costs are similar to federal costs. We used the report by the U.S. Government Accountability Office (GAO), Incarceration Costs and Elderly Offender - ilot Results, report GAO-12-807R, Briefing before the Subcommittee on Crime, Terrorism, and Homeland Security, Washington DC, July 27, 2012 to obtain short- and long-term costs. GAO provides capital and indirect cost percentages, which allowed us to obtain labor costs. We term labor costs as personnel services. In this case, personnel services include, in addition to the usual manpower costs, education and training of inmates. The GAO reported marginal costs, which includes food and medical, so that we were able to subtract such costs from the total direct costs to obtain just labor costs.

Kentucky: Most of the data were obtained from officials at the Kentucky DOC and from the Kentucky Legislative Research Commission (KLRC), 2009. An official from the Kentucky DOC provided us with the following public short run direct costs for the most comparable facilities to the contract prisons:

- ublic prison: Roederer Correctional Complex, minimum/medium 2011, \$53.78, and \$51.31 for 2012; private prison: Marion Adjustment Center, \$47.21, and \$\$43.98, respectively.

- ublic prison: Little Sandy Correctional Complex, minimum 2011, \$48.76, and \$50.53 for 2012; private prison: Otter Creek, medium \$44.14, and \$49.63, respectively.

For 2011:

http://corrections.ky.gov/about/Documents/Research%20and%20Statistics/Annual%20Reports/Cost%20to%20Incarcerate%202011.pdf

For 2012:

http://corrections.ky.gov/about/Documents/Research%20and%20Statistics/Annual%20Reports/Cost%20to%20Incarcerate%202012.pdf

Vera provided data on underfunded pensions, retiree healthcare contributions, underfunded retiree healthcare, and the number of inmates in the state. We used all that data to calculate the underfunded category (W19, X19, Y19, and Z19) to be (200,000+13,700,000+7,900,000)/ (21,347*365=\$2.80). The short run hierarchical costs were termed statewide administrative costs in the Vera report for 2009/2010 and calculated to be \$2,800,000/(21,347 inmates*365)=\$0.33. Again from Vera, we obtained the total interest costs of \$14.8 million. We then calculated the long run interest costs per inmate per day to be \$14.8 million/ (21,347 inmates*365)=\$1.90. KLRC, fiscal 2009 page 17 provided the cost of monitoring to be \$105,362 for 2009. We calculated the monitoring cost to be \$0.23 per inmate per day for the 1,234 private inmates. The state monitoring cost was included as Central Office Overheads attributed to - rivate (row 26a). The source for the amount is the KLRC, 2009, while the entries in Table 1 are for 2011 and 2012. The number of private inmates and the total number of inmates appears in the minimum/medium prison column, 2011. Again, the data on private and total inmates, as in all other examined states, come from BJS, 2011 for the year 2010. Inmate numbers change on a daily basis. Also, Vera's data refer to the fiscal year 2009/2010, while BJS refers to the calendar year 2010. The differences among the various sources are minor.

Maine: Main data were obtained from its Office of - rogram Evaluation & Government Accountability, Cost per - risoner in the State Correctional System, June 2012. Included in the state's report are all adult prisoners of 3 levels. - ersonnel services include pensions and benefits. We calculated the individual items by multiplying the \$42,538 annual per inmate costs by the percentage category on page 5 of the Maine report. Maine paid \$1.6 million in interest. According to the Vera Report, underfunded retiree healthcare amounted to \$5.1 million. - er diem underfunded retiree healthcare per inmate was then \$5,100,000/ (number of inmates, 2,038* 365)= \$6.85. Unaccounted hierarchical costs were \$1.4 million according to the Vera Report, and Maine reported general administration costs of \$2,520,425. Thus, hierarchical costs, which incorporate the two elements, are \$5.27 per inmate per day. The Vera Report provides \$1.6 million for capital costs which translates to \$2.16 per inmate per day.

Mississippi: Data were derived from the Joint Legislative Committee on - erformance Evaluation and Expenditure Review (- EER), Mississippi Department of Corrections FY2011 Cost per Inmate DayThe Mississippi Legislature, December 13, 2011. Data were extracted from page 8. For "- ersonnel Services," we added other costs to salary costs. Annual debt services are hypothetical costs that reflect what it would cost the MDOC to finance a new prison and are included in Table 1 as "Interest on Debt." These costs incorporate depreciation. Hierarchical costs include "Administrative Costs," which are costs imposed on other state agencies. Vera did not obtain data from Mississippi for any underfunded contributions or other unattributed costs for corrections.

Monitoring of the five private prisons is paid by the contracted prison as art of its per diem. The amount is about \$60,000 per prison, where four prisons house 1,000 inmates and the fifth 1,500 inmates, and occupancy is 98 percent. Thus, the cost per inmate per day is around \$0.15. Clearly, since

the cost is part of the price charged by the contracted prison, it is not separately incorporated in our matrix.

Ohio: Ohio Department of Rehabilitation and Corrections (ODRC) must achieve at least afive percent savings in the per diem for private contracts after adding the costs of monitoring. This is the maximum price to be charged by the private company. The 2000 data were more detailed than thedata in the recent years. However, since the precise source is incomplete, we chose to present the data without evaluating it. The 2010 and 2012 data were provided by the ODRC. The short run average variable cost for the public prisons of ODRC was calculated as a weighted average of the two public prisons most comparable to Lake Erie Correctional Institution, the privately contracted priso n. These were Richland Correctional Institution and Southeastern Correctional Institution. The weighting was done by the inmate population. The 2010 calculation was done by ODRC, while we followed the same procedure for 2012. Vera determined that the costs for 2010 were understated by 3.8 percent, and the same should be applied for 2012. We did not make the adjustment for the higher indirect and underfunded costs of 3.8 percent. Instead, in order to avoid double counting, we added the hierarchical costs and the federally determined 11 percent indirect costs calculated on the direct costs. Hierarchical costs are derived from the Vera Report for 2010 by dividing the statewide administrative costs of \$1,400,000 by the total number of inmates of 50,960 and by 365 to obtain \$0.075. Underfunded retiree healthcare of \$49,100,000 was similarly calculated to obtain \$2.64 per inmate per day. Indirect costs were calculated in the GAO Report, 2012 as 11 percent of short run direct costs. We applied that figure to calculate Ohio's short run indirect costs.

Ohio sold a 1,570-bed male prison to CCA in 2011 for \$72 million. Depreciation costs for both 2010 and 2012 were \$72.7 million/20 years/1,570 inmates/365= \$6.34. However, we chose to be conservative and therefore used the BO-/GAO modernization, depreciation, and repair figure of \$4.61. For interest paid on state bonds we used four percent on the actual Ohio's sale price of \$72.7 million to obtain a cost of \$5.07 per inmate per day. Since the prison was sold in 2011, we then calculated the short and long run percentage savings just for 2012.

Oklahoma: Data were obtained from Oklahoma Department of Corrections, Total Cost to State, "Statement of Operating Cost per Inmate Based on FY2011 Actuals." The category "Actual Costs" is assumed to refer to labor, education, and training including all benefits for such personnel. The unfunded pensions for 2010 were calculated as: \$11,600,000/(24,549*365)=\$1.29. These figures were obtained from Vera, the Oklahoma page. We included depreciation costs based on the \$4.61 figure calculated by the U.S. Bureau of - risons (US GAO, 2012), which was used to charge states for holding their inmates in federal prisons. OKDOC purchased in 2000 a 600-inmate private prison for about \$27 million. Computing interest (0.04 percent) per inmate (600) per day (365) yields \$4.93. Modernization, repair and depreciation of \$4.61 were obtained from the U.S. GAO based on the U.S. BO- study.

The number of private and total inmates, for every state was available from the U.S. DOJ, Bureau of Justice Statistics, 2011. - risoners in 2010. Appendix tables 1, and 20 (see http://bjs.ojp.usdoj.gov/content/pub/pdf/p10.pdf). For Oklahoma (and also for Mississippi and Kentucky), we included the total for the state statistics under the medium category. The prices per diem paid by OKDOC to the three medium-security male private prisonsand to the one maximum-security male private prisonare available at http://www.doc.state.ok.us/field/private_prisons/privates.htm. This website also includes the daily occupancy rates http://www.doc.state.ok.us/offenders/count.htm and ages of all prisons http://www.doc.state.ok.us/facilities.htm.

Tennessee: The Tennessee DOC provided a document from the General Assembly of the State of Tennessee Fiscal Review Committee, Memorandum on "Cost Comparison: State and - rivate - rison Contractors", April 26, 2010. The state is responsible for major maintenance of the privately operated

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prison, which is owned by the state. The central overhead allocation reflects state costs for private contract prisons. This allocation is 76-77 percent of its own cost for state prisons. Both items were added to the price by the legislature to determine whether the state five percent statutory savings were met. The data for the number of inmates (27,451), and number of inmates in private facilities (5,120) are for 2010, and derived from U.S. BJS, 2011.

Texas: Data were obtained from the Texas Legislative Budget Board Staff, Criminal Justice Uniform Cost Report, Fiscal Years 2008-2010, January, 2011. - ersonnel services include just wages and salaries. Benefits were calculated by dividing the total benefits (\$564,800,000) from Vera's report, by the average number of offenders (22,798) in the 1,000-bed prototype institutions (Table 14, p. 29) to obtain the daily cost. The calculation is as follows: (564,800,000/139,061)/365=\$11.12. Hierarchical costs were calculated for Texas from the Vera report as statewide administrative costs of 9,400,000/(139,061*365)=0.19. The 139,061 number of inmates was taken from the Texas legislative report, p. 39. Interest for capital outlays to fund repairs and rehabilitation was \$208.7 million in 2010, which is found in the Vera report. We ratioed the share of adult prisoners in prototype institution out of the total prisoners (22,798/139,061*208.7M)/(365*22,798)=\$4.11. Texas has underfunded pensions and retiree healthcare that it has neglected to pay. The Vera Report for fiscal year 2010 provides these numbers: \$48.1 million of underfunded pensions, \$177.2 million underfunded retire healthcare, adding to \$225.3 million. The underfunded total per inmate per day is \$225,000,000/(139,061 inmates*365)=\$4.44. Indirect short term cost was \$1.30 per inmate per day was reported in the Uniform Cost Report, January 2011. We chose to use the standardized BO-/GAO figure of eleven percent which is consistent with the data of most states.

Table 1: State Costs and Private Prices

	Itemized Costs by State, Custody & Year	AZ	AZ	CA	CA	FL	KY	KY	KY	KY	ME	MS	MS
		Min	Med		All		Min/Med	Min/Med	Med	Med		Min	Med/Max
	Custody/Year	2010	2010	2007/8	2011/12	5008/9	2011	2012	2011	2012	2011	2011	2011
	Personnel Services (mainly security)			29.60	67.01	38.83					79.25	21.19	20.58
	Medical Services			21.89	43.95	8.65					16.67	8.78	8.78
	Food				4.61						3.50	3.01	3.01
	Utilities										3.38		
П	Fuel										2.68		
	Contracted Professional services										2.10		
	Office & Supplies			o=70							2.10		
	State Provided Professional Services			4.20	2.54	4.90					1.52	2.31	0.83
	Technology										1.28		
10a	Rents										0.58		
11a	General Operations			80.6	13.91						0.58		
12a	Repairs										0.58		
13a	All Other				2.10						0.58		
14a	Paid Short Run Costs	46.59	48.32	94.77	134.12		53.78	51.31	48.76	50.53	114.79	35.29	33.20
15a	Underfunded Pensions (ind. healthcare)	2.67	2.67	15.18	15.18	0.55	2.80	2.80	2.80	2.80	98.9		
16a	Short Run Direct Costs	49.26	51.09	109.95	149.30	52.93	56.58	54.10	51.56	53.33	121.65	35.29	33.20
17a	Parole Board											0.15	0.15
18a	Hierarchical			4.66	7.11	0.18	0.33	0.33	0.33	0.33	5.27	2.81	2.81
19a	Other Short Run Indirect Costs					3.54	5.91	5.64	5.36	5.56	1.37		
20a	Short Run Indirect Costs	5.42	5.62	12.09	7.11	5.82	6.22	5.95	5.67	5.87	13.38	3.88	3.65
21a	Total short Run Costs	54.68	56.51	122.05	156.41	58.75	62.80	60.05	57.23	59.20	135.03	39.17	36.85
22a	Depreciation (capital cost)	9.30	9.30	4.61	4.61						2.15		
23a	Interest on Debt	0.04	0.04			7.05	1.90	1.90	1.90	1.90	2.15	11.26	7.57
24a	Total Long Run Costs	64.01	65.84	126.66	165.44	65.80	64.93	62.18	59.36	61.33	139.33	50.43	44.42
25a	State Maintenance Expense												
26a	Central Office Overhead Added Private				4.42		0.23	0.23	0.23	0.23			
27a	Contractor Per Diems	46.56	53.02	79.73	64.82	50.58	47.21	43.98	44.14	49.63	65.75		31.15
28a	# of Private Inmates	2,979	1,648	2,170	000'6	11,796	2,127		2,127				5,241
29a	# of All Inmates	12,981	14,521	165,062	134,000	104308	20,544		20,544		2,038		21,067
30a	SR percent Savings Prison 1	14.85	6.17	34.68	58.56	13.91	24.83	26.76	22.8	16.16	51.31		15.47
31a	SR Percent Savings Prison 2												
32a	LR Percent Savings Prison 1	27.27	19.48	37.05	60.82	23.13	27.29	29.27	25.64	19.07	52.81		29.88
33a	LR Percent Savings Prison 2	0000	20.00		0.00								00.00
248	Percent ruyate inmates	66.77	11.33	1.5.1	0.12	15.11	0.35	0.0	0.00	0.0	o i k	0.0	24.00
253	Statutory Savings requirements per 51	17.46	1001	46.03	100.63	10.07	0.10	0.10	0.10	0.10	INK	0.10	0.10
373	Unfunded nen & Ret ner inmate/day	0.04	0.04	0.12	0.00	0.01	0.04	0.05	97.6	0.05	0.05	45.57	0.03
38a	Percent labor costs of long run costs			47.06	40.50	59.01					56.88	42.02	46.33
39a	Existing & statutory Medical			68.82	144.57	19.26	11.23	11.98	9.28	5.38		54.17	17.61
40a	Statutory medical/Existing medical			2.14	2.29	1.23							1.01
4la	Long Run Costs	59.95	61.83	117.59	155.69	61.43	60.03	57.49	54.88	56.70	129.30	47.52	41.68
42a	Indirect Costs 25 Percent	1.35	1.40	3.02	1.78	1.46	1.56	1.49	1.42	1.47	3.35	0.97	0.91
43a	Percent SR Savings Indirect 25	8.01	-1.00	29.43	57.09	7.00	18.79	20.88	16.68	9.43	47.40		8.69

Cost Analysis of Public and Contractor-Operated Prisons - April 29, 2013

Custody/Year 1b Personnel Services 2b Medical Services 3b Food 4b Utilities 5b Fuel 6b Contracted Profes		2010	2000	2012	2010	Min	Med	Max 2011	Med	Prototype	Low
	* A A A A	7117	70 55	7 117		1100	2011			2010	2011
	Dersonnel Services (mainly security)		11.00		20102	28 94	29.61	66 29	7077	40.92	41.16
	1 Commission		47.07			000	0.37	75.00		5 0.7	17.10
+++	Delvices					07.0	7.31	00.01		232	
										1	
	Contracted Professional Services		1.58							0.02	
	Office & Supplies		7.64			0.72	0.71	0.72			
8b State Pr	State Provided Professional Services									NA	
9b Technology	logy					200					
10b Rents											
11b Genera	General Operations									4.53	
12b Repairs								6-10	0.43		
13b All other	To the state of th										
14b Paid Sh	Paid Short Run Costs	48.92	37.09	43.92		39.23	39.69	76.57	50.86	53.76	65.48
15b Underfu	Underfunded Pensions (incl.healthcare)	2.64		2.64		1.29	1.29	1.29		4.44	
	Short Run Direct Costs	51.56	37.09	46.56		40.52	40.98	77.86	51.29	58.20	65.48
\rightarrow	Board										
-1	hical								2.03	6.19	
19b Other S	Other Short Run Indirect Costs	2.67	4.08	5.12		4.46	4.51	8.57	5.64	6.40	7.20
20b Short R	Short Run Indirect Costs	2.67	4.08	5.12		4.46	4.51	8.57	79.7	6.59	7.20
21b Total sh	Total short Run Costs	57.23	41.17	51.68		44.98	45.49	86.43	58.96	64.79	72.68
-	Depreciation (capital cost)	4.61		4.61		4.61	4.61	4.61		4.11	4.61
23b Interest	Interest on Debt	5.07		5.07		4.93	4.93	4.93		4.11	
	Total Long Run Costs	66.92	41.17	61.37	0.00	54.52	55.03	95.97	99.09	73.01	77.29
25b State M	State Maintenance Expense								0.13		
26b Central	Central Office Overhead Added Private								1.57		
\rightarrow	Contractor Per Diems						43.02	56.62			
28b Contrac	Contractor Per Diem Prison1	45.86		45.86			40.28	57.96	42.29	37.47	
29b Contrac	Contractor Per Diem Prison 2						43.02	56.62			
30b # of Pri	# of Private Inmates	3,038			610'9				5,120	19,155	
31b # of All	# of All Inmates	51,712			26,252	6,684	7,802	196	27,451	173,649	
32b SR perc	SR percent Savings Prison 1	19.87%		11.26%			11.46	32.94	25.39	42.16	
-	SR Percent Savings Prison 2						5.44	34.49			
\rightarrow	LR Percent Savings Prison 1	31.47		25.27			21.83	41.00	30.29	48.68	
\rightarrow	LR Percent Savings Prison 2						21.83	41.00			
+	% Private Inmates	5.87			22.93		45.74	27.13	18.70	11.03	
37b Statutor	Statutory Savings requirements per \$1	0.05	0.05	0.05						0.10	NR
38b Max M	Max Med costs to Reach statutory Limit	17.71	/2	12.44			14.75	38.01		28.24	
39b Unfund	Unfunded pen & Ret per inmate/day	0.04		0.04			0.02	0.01		90.0	
40b Percent	Percent labor costs of long run costs		02.70			53.08	53.80	68.03		50.05	53.25
41b Existing	Existing & statutory Medical	17.71		12.44		NR	24.12	48.57		34.21	
42b Statutor	Statutory medical/Existing medical						1.57	3.60		4.73	
43b Indirect	Indirect Costs 25 Percent	1.42	1.02	1.28		1.11	1.13	2.14	1.92	1.65	1.80
44b Percent	Percent SR Savings Indirect 25 Prison 1	13.44		4.14			4.35	27.56	17.32	37.39	
45b Percent	Percent SR Savings Indirect 25 Prison 2						-2.16	29.23			
46b Percent	Percent LR Savings Prison 1 Indirect 25	26.81		20.28			22.02	35.27	17.32	44.95	
47b Percent	47b Percent LR Savings Prison 2 Indirect 25						16.71	36.77			

Cost Analysis of Public and Contractor-Operated Prisons – April 29, 2013